SUBJECT INDEX

Aerodynamics
New Airfoil-Design Concept with Improved Aerodynamic Characteristics, Demeter G. Fertis, AS July 94, p328-339.

Aeroelasticity
Optimization Procedure for Design of High-Speed Prop-Rotors, Aditi Chattopadhyay and Johnny R. Narayan, AS Apr. 94, p143-155.

Aerospace engineering
Viscoplastic Response of Structures for Intense Local Heating, Earl A. Thornton and J. D. Kolenski, AS Jan. 94, p50-71.

Aerospace transport
System for Orbital Recovery of Space Shuttle's External Tank, Raul Ferri, AS Jan. 94, p92-103.

Aircraft
Damage Containment and Residual Strength of Composite Laminates, C. S. Chu, AS Apr. 94, p240-243.

New Airfoil-Design Concept with Improved Aerodynamic Characteristics, Demeter G. Fertis, AS July 94, p328-339.

Aircraft technology
New Airfoil-Design Concept with Improved Aerodynamic Characteristics, Demeter G. Fertis, AS July 94, p328-339.

Optimization Procedure for Design of High-Speed Prop-Rotors, Aditi Chattopadhyay and Johnny R. Narayan, AS Apr. 94, p143-155.

Algorithms
Augmented Lagrangian Genetic Algorithm for Structural Optimization, Hojjat Adeli and Nai-Tsang Cheng, AS Jan. 94, p104-118.

Concurrent Genetic Algorithms for Optimization of Large Structures, Hojjat Adeli and Nai-Tsang Cheng, AS July 94, p276-296.

Finite-Element Calculations on Alliant FX/80, Brian C. Watson and Manohar P. Kamat, AS Oct. 94, p446-462.

Parallel Algorithms for Integrated Structural/Control Optimization, A. Saleh and H. Adeli, AS July 94, p297-314.

Spectral Representation of High-Frequency Space Shuttle Data, P. D. Spanos, L. J. Mushung, D. A. Nelson, Jr. and D. A. Hamilton, AS July 94, p315-327.

Atmospheric pressure
Atmospheric Pressure within Lunar Structure, Paul S. Nowak, Jeffrey Janakus and Charles E. Mitchell, AS Oct. 94, p398-410.

Automation
Construction Robot Force Control in Cleaning Operations, Y. Zhou and M. J. Skibniewski, AS Jan. 94, p33-49.

Kinematics of Excavators (Backhoes) for Transferring Surface Material, A. J. Koivo, AS Jan. 94, p17-32.

Backhoes
Kinematics of Excavators (Backhoes) for Transferring Surface Material, A. J. Koivo, AS Jan. 94, p17-32.

Beams
Load-Deflection Behavior of Space-Based Inflatable Fabric Beams, J. A. Main, S. W. Peterson and A. M. Strauss, AS Apr. 94, p225-238.

Bending
Load-Deflection Behavior of Space-Based Inflatable Fabric Beams, J. A. Main, S. W. Peterson and A. M. Strauss, AS Apr. 94, p225-238.

Buckling
Buckling and Vibration Analysis of Laminated Panels Using VICONOPT, David Kennedy, Fred W. Williams and Melvin S. Anderson, AS July 94, p245-262.

Cable cars
Cable-Based Lunar Transportation System, Leonhard E. Bernold, AS Jan. 94, p1-16.

Cables
Cable-Based Lunar Transportation System, Leonhard E. Bernold, AS Jan. 94, p1-16.

Ceramics
Processing of Lunar Materials, W. Howard Poisl and B. D. Fabes, AS July 94, p263-275.

Composite materials
Damage Containment and Residual Strength of Composite Laminates, C. S. Chu, AS Apr. 94, p240-243.

Nonlinear Analysis of Angle-Ply Composite and Sandwich Laminates, T. Kant and J. R. Kommineni, AS July 94, p342-352.

Compressive strength
Damage Containment and Residual Strength of Composite Laminates, C. S. Chu, AS Apr. 94, p240-243.

Computer analysis
Buckling and Vibration Analysis of Laminated Panels Using VICONOPT, David Kennedy, Fred W. Williams and Melvin S. Anderson, AS July 94, p245-262.

Computer applications
Concurrent Genetic Algorithms for Optimization of Large Structures, Hojjat Adeli and Nai-Tsang Cheng, AS July 94, p276-296.

Microtasking, Macrotasking, and Autotasking for Structural Optimization, A. Saleh and H. Adeli, AS Apr. 94, p156-174.

Computer programs
Buckling and Vibration Analysis of Laminated Panels Using VICONOPT, David Kennedy, Fred W. Williams and Melvin S. Anderson, AS July 94, p245-262.

Connections

Equivalent Continuum Model for Deployable Flat Lattice Structures, Charis Gantes, Jerome J. Connor and Robert D. Logcher, AS Jan. 94, p72-91.

Constitutive models

Viscoplastic Response of Structures for Intense Local Heating, Earl A. Thornton and J. D. Kolenski, AS Jan. 94, p50-71.

Construction

Cable-Based Lunar Transportation System, Leonhard E. Bernold, AS Jan. 94, p1-16.

Compaction of Lunar-Type Soil, Leonhard E. Bernold, AS Apr. 94, p175-187.

Construction Robot Force Control in Cleaning Operations, Y. Zhou and M. J. Skibniewski, AS Jan. 94, p33-49.

Construction equipment

Kinematics of Excavators (Backhoes) for Transferring Surface Material, A. J. Koivo, AS Jan. 94, p17-32.

Construction methods

Design and Construction of Shielded Lunar Outpost, S. D. Jolly, J. Happel and S. Sture, AS Oct. 94, p417-434.

Contact pressure

Construction Robot Force Control in Cleaning Operations, Y. Zhou and M. J. Skibniewski, AS Jan. 94, p33-49.

Continuous beams

Continuous Dynamic Model for Tapered Beam-Like Structures, Ji Yao Shen, Elias G. Abu-Saba, William M. McGinley, Lonnie Sharpe, Jr. and Lawrence W. Taylor, Jr., AS Oct. 94, p435-445.

Continuum mechanics

Equivalent Continuum Model for Deployable Flat Lattice Structures, Charis Gantes, Jerome J. Connor and Robert D. Logcher, AS Jan. 94, p72-91.

Control

Construction Robot Force Control in Cleaning Operations, Y. Zhou and M. J. Skibniewski, AS Jan. 94, p33-49.

Control systems

Parallel Algorithms for Integrated Structural/Control Optimization, A. Saleh and H. Adeli, AS July 94, p297-314.

Conveyors

Pneumatic Conveying of Materials at Partial Gravity, Thomas A. Sullivan, Elissa Koenig, Christian W. Knudsen and Michael A. Gibson, AS Apr. 94, p199-208.

Damage prevention

Damage Containment and Residual Strength of Composite Laminates, C. S. Chu, AS Apr. 94, p240-243.

Data analysis

Spectral Representation of High-Frequency Space Shuttle Data, P. D. Spanos, L. J. Mushung, D. A. Nelson, Jr. and D. A. Hamilton, AS July 94, p315-327.

Design

New Airfoil-Design Concept with Improved Aerodynamic Characteristics, Demeter G. Fertis, AS July 94, p328-339.

Next Generation Space Telescope. I: Design Considerations, B. Scott May and Nicholas P. Jones, AS Oct. 94, p355-374.

Optimization Procedure for Design of High-Speed Prop-Rotors, Aditi Chattopadhyay and Johnny R. Narayan, AS Apr. 94, p143-155.

Design criteria

Considerations for Design Criteria for Lunar Structures, Eric P. Steinberg and William Bulleit, AS Apr. 94, p188-198.

Digital techniques

Spectral Representation of High-Frequency Space Shuttle Data, P. D. Spanos, L. J. Mushung, D. A. Nelson, Jr. and D. A. Hamilton, AS July 94, p315-327.

Disturbances

Next Generation Space Telescope. I: Design Considerations, B. Scott May and Nicholas P. Jones, AS Oct. 94, p355-374.

Next Generation Space Telescope. II: Proposed Pointing Control Syste[illegible] B. Scott May and Nicholas P. Jones, AS Oct. 94, p375-397.

Drag

New Airfoil-Design Concept with Improved Aerodynamic Characteristics, Demeter G. Fertis, AS July 94, p328-339.

Dynamic analysis

Continuous Dynamic Model for Tapered Beam-Like Structures, Ji Yao Shen, Elias G. Abu-Saba, William M. McGinley, Lonnie Sharpe, Jr. and Lawrence W. Taylor, Jr., AS Oct. 94, p435-445.

Extraterrestrial bases

Atmospheric Pressure within Lunar Structure, Paul S. Nowak, Jeffrey Janakus and Charles E. Mitchell, AS Oct. 94, p398-410.

Design and Construction of Shielded Lunar Outpost, S. D. Jolly, J. Happel and S. Sture, AS Oct. 94, p417-434.

Fabrics

Load-Deflection Behavior of Space-Based Inflatable Fabric Beams, J. A. Main, S. W. Peterson and A. M. Strauss, AS Apr. 94, p225-238.

Feedback control

Next Generation Space Telescope. I: Design Considerations, B. Scott May and Nicholas P. Jones, AS Oct. 94, p355-374.

Next Generation Space Telescope. II: Proposed Pointing Control System, B. Scott May and Nicholas P. Jones, AS Oct. 94, p375-397.

Finite element method

Finite-Element Calculations on Alliant FX/80, Brian C. Watson and Manohar P. Kamat, AS Oct. 94, p446-462.

Viscoplastic Response of Structures for Intense Local Heating, Earl A. Thornton and J. D. Kolenski, AS Jan. 94, p50-71.

Finite elements
Nonlinear Analysis of Angle-Ply Composite and Sandwich Laminates, T. Kant and J. R. Kommineni, AS July 94, p342-352.

Flexibility
Modular Spacecraft, Warren Frisina, AS Oct. 94, p411-416.

Force
Construction Robot Force Control in Cleaning Operations, Y. Zhou and M. J. Skibniewski, AS Jan. 94, p33-49.

Gravity
Pneumatic Conveying of Materials at Partial Gravity, Thomas A. Sullivan, Elissa Koenig, Christian W. Knudsen and Michael A. Gibson, AS Apr. 94, p199-208.

Impact forces
Damage Containment and Residual Strength of Composite Laminates, C. S. Chu, AS Apr. 94, p240-243.

Inflatable structures
Load-Deflection Behavior of Space-Based Inflatable Fabric Beams, J. A. Main, S. W. Peterson and A. M. Strauss, AS Apr. 94, p225-238.

Tension Element to Reduce Loads in Rim Support of Inflatable Reflector, Gershon Grossman, AS Apr. 94, p129-142.

Internal pressure
Atmospheric Pressure within Lunar Structure, Paul S. Nowak, Jeffrey Janakus and Charles E. Mitchell, AS Oct. 94, p398-410.

Kinematics
Kinematics of Excavators (Backhoes) for Transferring Surface Material, A. J. Koivo, AS Jan. 94, p17-32.

Laminates
Damage Containment and Residual Strength of Composite Laminates, C. S. Chu, AS Apr. 94, p240-243.

Large structures
Concurrent Genetic Algorithms for Optimization of Large Structures, Hojjat Adeli and Nai-Tsang Cheng, AS July 94, p276-296.

Lattices
Equivalent Continuum Model for Deployable Flat Lattice Structures, Charis Gantes, Jerome J. Connor and Robert D. Logcher, AS Jan. 94, p72-91.

Life cycles
Considerations for Design Criteria for Lunar Structures, Eric P. Steinberg and William Bulleit, AS Apr. 94, p188-198.

Lift
New Airfoil-Design Concept with Improved Aerodynamic Characteristics, Demeter G. Fertis, AS July 94, p328-339.

Linear systems
Finite-Element Calculations on Alliant FX/80, Brian C. Watson and Manohar P. Kamat, AS Oct. 94, p446-462.

Materials
Processing of Lunar Materials, W. Howard Poisl and B. D. Fabes, AS July 94, p263-275.

Materials engineering
Processing of Lunar Materials, W. Howard Poisl and B. D. Fabes, AS July 94, p263-275.

Materials, properties
Processing of Lunar Materials, W. Howard Poisl and B. D. Fabes, AS July 94, p263-275.

Mechanical properties
Processing of Lunar Materials, W. Howard Poisl and B. D. Fabes, AS July 94, p263-275.

Meteors
Design and Construction of Shielded Lunar Outpost, S. D. Jolly, J. Happel and S. Sture, AS Oct. 94, p417-434.

Minimum weight design
Augmented Lagrangian Genetic Algorithm for Structural Optimization, Hojjat Adeli and Nai-Tsang Cheng, AS Jan. 94, p104-118.

Concurrent Genetic Algorithms for Optimization of Large Structures, Hojjat Adeli and Nai-Tsang Cheng, AS July 94, p276-296.

Models
Continuous Dynamic Model for Tapered Beam-Like Structures, Ji Yao Shen, Elias G. Abu-Saba, William M. McGinley, Lonnie Sharpe, Jr. and Lawrence W. Taylor, Jr., AS Oct. 94, p435-445.

Equivalent Continuum Model for Deployable Flat Lattice Structures, Charis Gantes, Jerome J. Connor and Robert D. Logcher, AS Jan. 94, p72-91.

Modular structures
Modular Spacecraft, Warren Frisina, AS Oct. 94, p411-416.

Moon
Atmospheric Pressure within Lunar Structure, Paul S. Nowak, Jeffrey Janakus and Charles E. Mitchell, AS Oct. 94, p398-410.

Cable-Based Lunar Transportation System, Leonhard E. Bernold, AS Jan. 94, p1-16.

Compaction of Lunar-Type Soil, Leonhard E. Bernold, AS Apr. 94, p175-187.

Considerations for Design Criteria for Lunar Structures, Eric P. Steinberg and William Bulleit, AS Apr. 94, p188-198.

Design and Construction of Shielded Lunar Outpost, S. D. Jolly, J. Happel and S. Sture, AS Oct. 94, p417-434.

Pneumatic Conveying of Materials at Partial Gravity, Thomas A. Sullivan, Elissa Koenig, Christian W. Knudsen and Michael A. Gibson, AS Apr. 94, p199-208.

Processing of Lunar Materials, W. Howard Poisl and B. D. Fabes, AS July 94, p263-275.

Nonlinear analysis
Nonlinear Analysis of Angle-Ply Composite and Sandwich Laminates, T. Kant and J. R. Kommineni, AS July 94, p342-352.

Optimal control methods

Next Generation Space Telescope. I: Design Considerations, B. Scott May and Nicholas P. Jones, AS Oct. 94, p355-374.

Next Generation Space Telescope. II: Proposed Pointing Control System, B. Scott May and Nicholas P. Jones, AS Oct. 94, p375-397.

Optimization

Augmented Lagrangian Genetic Algorithm for Structural Optimization, Hojjat Adeli and Nai-Tsang Cheng, AS Jan. 94, p104-118.

Concurrent Genetic Algorithms for Optimization of Large Structures, Hojjat Adeli and Nai-Tsang Cheng, AS July 94, p276-296.

Microtasking, Macrotasking, and Autotasking for Structural Optimization, A. Saleh and H. Adeli, AS Apr. 94, p156-174.

Optimization of Space Trusses on Vector Multiprocessor, H. Adeli and H. -L. Hsu, AS Jan. 94, p120-126.

Parallel Algorithms for Integrated Structural/Control Optimization, A. Saleh and H. Adeli, AS July 94, p297-314.

Processing of Lunar Materials, W. Howard Poisl and B. D. Fabes, AS July 94, p263-275.

orbits

System for Orbital Recovery of Space Shuttle's External Tank, Raul Ferri, AS Jan. 94, p92-103.

Parabolic bodies

Tension Element to Reduce Loads in Rim Support of Inflatable Reflector, Gershon Grossman, AS Apr. 94, p129-142.

Parallel processing

Concurrent Genetic Algorithms for Optimization of Large Structures, Hojjat Adeli and Nai-Tsang Cheng, AS July 94, p276-296.

Finite-Element Calculations on Alliant FX/80, Brian C. Watson and Manohar P. Kamat, AS Oct. 94, p446-462.

Microtasking, Macrotasking, and Autotasking for Structural Optimization, A. Saleh and H. Adeli, AS Apr. 94, p156-174.

Optimization of Space Trusses on Vector Multiprocessor, H. Adeli and H. -L. Hsu, AS Jan. 94, p120-126.

Parallel Algorithms for Integrated Structural/Control Optimization, A. Saleh and H. Adeli, AS July 94, p297-314.

Plates

Buckling and Vibration Analysis of Laminated Panels Using VICONOPT, David Kennedy, Fred W. Williams and Melvin S. Anderson, AS July 94, p245-262.

Pneumatic systems

Pneumatic Conveying of Materials at Partial Gravity, Thomas A. Sullivan, Elissa Koenig, Christian W. Knudsen and Michael A. Gibson, AS Apr. 94, p199-208.

Prefabrication

Equivalent Continuum Model for Deployable Flat Lattice Structures, Charis Gantes, Jerome J. Connor and Robert D. Logcher, AS Jan. 94, p72-91.

Radiation

Design and Construction of Shielded Lunar Outpost, S. D. Jolly, J. Happel and S. Sture, AS Oct. 94, p417-434.

Resource recovery

System for Orbital Recovery of Space Shuttle's External Tank, Raul Ferri, AS Jan. 94, p92-103.

Rigid-body dynamics

Next Generation Space Telescope. I: Design Considerations, B. Scott May and Nicholas P. Jones, AS Oct. 94, p355-374.

Next Generation Space Telescope. II: Proposed Pointing Control System, B. Scott May and Nicholas P. Jones, AS Oct. 94, p375-397.

Robotics

Construction Robot Force Control in Cleaning Operations, Y. Zhou and M. J. Skibniewski, AS Jan. 94, p33-49.

Kinematics of Excavators (Backhoes) for Transferring Surface Material, A. J. Koivo, AS Jan. 94, p17-32.

Welded Joints for Robotic On-Orbit Assembly of Space Structures, William K. Rule and Frank P. Thomas, AS Apr. 94, p209-224.

Sandwich laminates

Nonlinear Analysis of Angle-Ply Composite and Sandwich Laminates, T. Kant and J. R. Kommineni, AS July 94, p342-352.

Shear deformation

Nonlinear Analysis of Angle-Ply Composite and Sandwich Laminates, T. Kant and J. R. Kommineni, AS July 94, p342-352.

Soil compaction

Compaction of Lunar-Type Soil, Leonhard E. Bernold, AS Apr. 94, p175-187.

Soil investigations

Compaction of Lunar-Type Soil, Leonhard E. Bernold, AS Apr. 94, p175-187.

Soils

Compaction of Lunar-Type Soil, Leonhard E. Bernold, AS Apr. 94, p175-187.

Pneumatic Conveying of Materials at Partial Gravity, Thomas A. Sullivan, Elissa Koenig, Christian W. Knudsen and Michael A. Gibson, AS Apr. 94, p199-208.

Solar collectors

Tension Element to Reduce Loads in Rim Support of Inflatable Reflector, Gershon Grossman, AS Apr. 94, p129-142.

Space colonies

Atmospheric Pressure within Lunar Structure, Paul S. Nowak, Jeffrey Janakus and Charles E. Mitchell, AS Oct. 94, p398-410.

Design and Construction of Shielded Lunar Outpost, S. D. Jolly, J. Happel and S. Sture, AS Oct. 94, p417-434.

Space exploration

Modular Spacecraft, Warren Frisina, AS Oct. 94, p411-416.

Next Generation Space Telescope. I: Design Considerations, B. Scott May and Nicholas P. Jones, AS Oct. 94, p355-374.

Next Generation Space Telescope. II: Proposed Pointing Control System, B. Scott May and Nicholas P. Jones, AS Oct. 94, p375-397.

System for Orbital Recovery of Space Shuttle's External Tank, Raul Ferri, AS Jan. 94, p92-103.

Space frames

Equivalent Continuum Model for Deployable Flat Lattice Structures, Charis Gantes, Jerome J. Connor and Robert D. Logcher, AS Jan. 94, p72-91.

Space shuttle orbiter

Spectral Representation of High-Frequency Space Shuttle Data, P. D. Spanos, L. J. Mushung, D. A. Nelson, Jr. and D. A. Hamilton, AS July 94, p315-327.

Space stations

Microtasking, Macrotasking, and Autotasking for Structural Optimization, A. Saleh and H. Adeli, AS Apr. 94, p156-174.

Modular Spacecraft, Warren Frisina, AS Oct. 94, p411-416.

Space structures

Atmospheric Pressure within Lunar Structure, Paul S. Nowak, Jeffrey Janakus and Charles E. Mitchell, AS Oct. 94, p398-410.

Augmented Lagrangian Genetic Algorithm for Structural Optimization, Hojjat Adeli and Nai-Tsang Cheng, AS Jan. 94, p104-118.

Cable-Based Lunar Transportation System, Leonhard E. Bernold, AS Jan. 94, p1-16.

Concurrent Genetic Algorithms for Optimization of Large Structures, Hojjat Adeli and Nai-Tsang Cheng, AS July 94, p276-296.

Considerations for Design Criteria for Lunar Structures, Eric P. Steinberg and William Bulleit, AS Apr. 94, p188-198.

Continuous Dynamic Model for Tapered Beam-Like Structures, Ji Yao Shen, Elias G. Abu-Saba, William M. McGinley, Lonnie Sharpe, Jr. and Lawrence W. Taylor, Jr., AS Oct. 94, p435-445.

Microtasking, Macrotasking, and Autotasking for Structural Optimization, A. Saleh and H. Adeli, AS Apr. 94, p156-174.

Optimization of Space Trusses on Vector Multiprocessor, H. Adeli and H. -L. Hsu, AS Jan. 94, p120-126.

Welded Joints for Robotic On-Orbit Assembly of Space Structures, William K. Rule and Frank P. Thomas, AS Apr. 94, p209-224.

Spacecraft

Modular Spacecraft, Warren Frisina, AS Oct. 94, p411-416.

Next Generation Space Telescope. I: Design Considerations, B. Scott May and Nicholas P. Jones, AS Oct. 94, p355-374.

Next Generation Space Telescope. II: Proposed Pointing Control System, B. Scott May and Nicholas P. Jones, AS Oct. 94, p375-397.

System for Orbital Recovery of Space Shuttle's External Tank, Raul Ferri, AS Jan. 94, p92-103.

Spectral analysis

Spectral Representation of High-Frequency Space Shuttle Data, P. D. Spanos, L. J. Mushung, D. A. Nelson, Jr. and D. A. Hamilton, AS July 94, p315-327.

Speed

Optimization Procedure for Design of High-Speed Prop-Rotors, Aditi Chattopadhyay and Johnny R. Narayan, AS Apr. 94, p143-155.

Stability

Optimization Procedure for Design of High-Speed Prop-Rotors, Aditi Chattopadhyay and Johnny R. Narayan, AS Apr. 94, p143-155.

Static tests

Compaction of Lunar-Type Soil, Leonhard E. Bernold, AS Apr. 94, p175-187.

Stiffness

Equivalent Continuum Model for Deployable Flat Lattice Structures, Charis Gantes, Jerome J. Connor and Robert D. Logcher, AS Jan. 94, p72-91.

Stiffness matrix

Buckling and Vibration Analysis of Laminated Panels Using VICONOPT, David Kennedy, Fred W. Williams and Melvin S. Anderson, AS July 94, p245-262.

Structural analysis

Load-Deflection Behavior of Space-Based Inflatable Fabric Beams, J. A. Main, S. W. Peterson and A. M. Strauss, AS Apr. 94, p225-238.

Optimization of Space Trusses on Vector Multiprocessor, H. Adeli and H. -L. Hsu, AS Jan. 94, p120-126.

Viscoplastic Response of Structures for Intense Local Heating, Earl A. Thornton and J. D. Kolenski, AS Jan. 94, p50-71.

Structural design

Augmented Lagrangian Genetic Algorithm for Structural Optimization, Hojjat Adeli and Nai-Tsang Cheng, AS Jan. 94, p104-118.

Considerations for Design Criteria for Lunar Structures, Eric P. Steinberg and William Bulleit, AS Apr. 94, p188-198.

Structural engineering

Design and Construction of Shielded Lunar Outpost, S. D. Jolly, J. Happel and S. Sture, AS Oct. 94, p417-434.

Structures

Parallel Algorithms for Integrated Structural/Control Optimization, A. Saleh and H. Adeli, AS July 94, p297-314.

Supports

Tension Element to Reduce Loads in Rim Support of Inflatable Reflector, Gershon Grossman, AS Apr. 94, p129-142.

Tanks

System for Orbital Recovery of Space Shuttle's External Tank, Raul Ferri, AS Jan. 94, p92-103.

Taper

Continuous Dynamic Model for Tapered Beam-Like Structures, Ji Yao Shen, Elias G. Abu-Saba, William M. McGinley, Lonnie Sharpe, Jr. and Lawrence W. Taylor, Jr., AS Oct. 94, p435-445.

Telescopes

Next Generation Space Telescope. I: Design Considerations, B. Scott May and Nicholas P. Jones, AS Oct. 94, p355-374.

Next Generation Space Telescope. II: Proposed Pointing Control System, B. Scott May and Nicholas P. Jones, AS Oct. 94, p375-397.

Temperature effects

Viscoplastic Response of Structures for Intense Local Heating, Earl A. Thornton and J. D. Kolenski, AS Jan. 94, p50-71.

Tensile loading

Tension Element to Reduce Loads in Rim Support of Inflatable Reflector, Gershon Grossman, AS Apr. 94, p129-142.

Theories

Nonlinear Analysis of Angle-Ply Composite and Sandwich Laminates, T. Kant and J. R. Kommineni, AS July 94, p342-352.

Thermal stresses

Viscoplastic Response of Structures for Intense Local Heating, Earl A. Thornton and J. D. Kolenski, AS Jan. 94, p50-71.

Transport phenomena

Pneumatic Conveying of Materials at Partial Gravity, Thomas A. Sullivan, Elissa Koenig, Christian W. Knudsen and Michael A. Gibson, AS Apr. 94, p199-208.

Transportation systems

Cable-Based Lunar Transportation System, Leonhard E. Bernold, AS Jan. 94, p1-16.

Trusses

Optimization of Space Trusses on Vector Multiprocessor, H. Adeli and H. -L. Hsu, AS Jan. 94, p120-126.

Welded Joints for Robotic On-Orbit Assembly of Space Structures, William K. Rule and Frank P. Thomas, AS Apr. 94, p209-224.

Vibration

Buckling and Vibration Analysis of Laminated Panels Using VICONOPT, David Kennedy, Fred W. Williams and Melvin S. Anderson, AS July 94, p245-262.

Vibratory compactors

Compaction of Lunar-Type Soil, Leonhard E. Bernold, AS Apr. 94, p175-187.

Welded joints

Welded Joints for Robotic On-Orbit Assembly of Space Structures, William K. Rule and Frank P. Thomas, AS Apr. 94, p209-224.

Welding

Welded Joints for Robotic On-Orbit Assembly of Space Structures, William K. Rule and Frank P. Thomas, AS Apr. 94, p209-224.

AUTHOR INDEX

Abu-Saba, Elias G.
see Shen, Ji Yao, AS Oct. 94, p435-445

Adeli, H.
Optimization of Space Trusses on Vector Multiprocessor, with H. -L. Hsu, AS Jan. 94, p120-126
see Saleh, A., AS Apr. 94, p156-174
see Saleh, A., AS July 94, p297-314

Adeli, Hojjat
Augmented Lagrangian Genetic Algorithm for Structural Optimization, with Nai-Tsang Cheng, AS Jan. 94, p104-118
Concurrent Genetic Algorithms for Optimization of Large Structures, with Nai-Tsang Cheng, AS July 94, p276-296

Anderson, Melvin S.
see Kennedy, David, AS July 94, p245-262

Bernold, Leonhard E.
Cable-Based Lunar Transportation System, AS Jan. 94, p1-16
Compaction of Lunar-Type Soil, AS Apr. 94, p175-187

Bulleit, William
see Steinberg, Eric P., AS Apr. 94, p188-198

Chattopadhyay, Aditi
Optimization Procedure for Design of High-Speed Prop-Rotors, with Johnny R. Narayan, AS Apr. 94, p143-155

Cheng, Nai-Tsang
see Adeli, Hojjat, AS Jan. 94, p104-118
see Adeli, Hojjat, AS July 94, p276-296

Chu, C. S.
Damage Containment and Residual Strength of Composite Laminates, AS Apr. 94, p240-243

Connor, Jerome J.
see Gantes, Charis, AS Jan. 94, p72-91

Fabes, B. D.
see Poisl, W. Howard, AS July 94, p263-275

Ferri, Raul
System for Orbital Recovery of Space Shuttle's External Tank, AS Jan. 94, p92-103

Fertis, Demeter G.
New Airfoil-Design Concept with Improved Aerodynamic Characteristics, AS July 94, p328-339

Frisina, Warren
Modular Spacecraft, AS Oct. 94, p411-416

Gantes, Charis
Equivalent Continuum Model for Deployable Flat Lattice Structures, with Jerome J. Connor and Robert D. Logcher, AS Jan. 94, p72-91

Gibson, Michael A.
see Sullivan, Thomas A., AS Apr. 94, p199-208

Grossman, Gershon
Tension Element to Reduce Loads in Rim Support of Inflatable Reflector, AS Apr. 94, p129-142
err: AS Oct. 94, p463

Hamilton, D. A.
see Spanos, P. D., AS July 94, p315-327

Happel, J.
see Jolly, S. D., AS Oct. 94, p417-434

Hsu, H. -L.
see Adeli, H., AS Jan. 94, p120-126

Janakus, Jeffrey
see Nowak, Paul S., AS Oct. 94, p398-410

Jolly, S. D.
Design and Construction of Shielded Lunar Outpost, with J. Happel and S. Sture, AS Oct. 94, p417-434

Jones, Nicholas P.
see May, B. Scott, AS Oct. 94, p355-374
see May, B. Scott, AS Oct. 94, p375-397

Kamat, Manohar P.
see Watson, Brian C., AS Oct. 94, p446-462

Kant, T.
Nonlinear Analysis of Angle-Ply Composite and Sandwich Laminates, with J. R. Kommineni, AS July 94, p342-352

Kennedy, David
Buckling and Vibration Analysis of Laminated Panels Using VICONOPT, with Fred W. Williams and Melvin S. Anderson, AS July 94, p245-262

Knudsen, Christian W.
see Sullivan, Thomas A., AS Apr. 94, p199-208

Koenig, Elissa
see Sullivan, Thomas A., AS Apr. 94, p199-208

Koivo, A. J.
Kinematics of Excavators (Backhoes) for Transferring Surface Material, AS Jan. 94, p17-32

Kolenski, J. D.
see Thornton, Earl A., AS Jan. 94, p50-71

Kommineni, J. R.
see Kant, T., AS July 94, p342-352

Logcher, Robert D.
see Gantes, Charis, AS Jan. 94, p72-91

Main, J. A.
Load-Deflection Behavior of Space-Based Inflatable Fabric Beams, with S. W. Peterson and A. M. Strauss, AS Apr. 94, p225-238

May, B. Scott
Next Generation Space Telescope. I: Design Considerations, with Nicholas P. Jones, AS Oct. 94, p355-374
Next Generation Space Telescope. II: Proposed Pointing Control System, with Nicholas P. Jones, AS Oct. 94, p375-397

McGinley, William M.
see Shen, Ji Yao, AS Oct. 94, p435-445

Mitchell, Charles E.
see Nowak, Paul S., AS Oct. 94, p398-410

Mushung, L. J.
see Spanos, P. D., AS July 94, p315-327

Narayan, Johnny R.
see Chattopadhyay, Aditi, AS Apr. 94, p143-155

Nelson, D. A., Jr.
see Spanos, P. D., AS July 94, p315-327

Nowak, Paul S.
Atmospheric Pressure within Lunar Structure, with Jeffrey Janakus and Charles E. Mitchell, AS Oct. 94, p398-410

Peterson, S. W.
see Main, J. A., AS Apr. 94, p225-238

Poisl, W. Howard
Processing of Lunar Materials, with B. D. Fabes, AS July 94, p263-275

Rule, William K.
Welded Joints for Robotic On-Orbit Assembly of Space Structures, with Frank P. Thomas, AS Apr. 94, p209-224

Saleh, A.
Microtasking, Macrotasking, and Autotasking for Structural Optimization, with H. Adeli, AS Apr. 94, p156-174
Parallel Algorithms for Integrated Structural/Control Optimization, with H. Adeli, AS July 94, p297-314

Sharpe, Lonnie, Jr.
see Shen, Ji Yao, AS Oct. 94, p435-445

Shen, Ji Yao
Continuous Dynamic Model for Tapered Beam-Like Structures, with Elias G. Abu-Saba, William M. McGinley, Lonnie Sharpe, Jr. and Lawrence W. Taylor, Jr., AS Oct. 94, p435-445

Skibniewski, M. J.
see Zhou, Y., AS Jan. 94, p33-49

Spanos, P. D.
Spectral Representation of High-Frequency Space Shuttle Data, with L. J. Mushung, D. A. Nelson, Jr. and D. A. Hamilton, AS July 94, p315-327

Steinberg, Eric P.
Considerations for Design Criteria for Lunar Structures, with William Bulleit, AS Apr. 94, p188-198

Strauss, A. M.
see Main, J. A., AS Apr. 94, p225-238

Sture, S.
see Jolly, S. D., AS Oct. 94, p417-434

Sullivan, Thomas A.
Pneumatic Conveying of Materials at Partial Gravity, with Elissa Koenig, Christian W. Knudsen and Michael A. Gibson, AS Apr. 94, p199-208

Taylor, Lawrence W., Jr.
see Shen, Ji Yao, AS Oct. 94, p435-445

Thomas, Frank P.
see Rule, William K., AS Apr. 94, p209-224

Thornton, Earl A.
Viscoplastic Response of Structures for Intense Local Heating, with J. D. Kolenski, AS Jan. 94, p50-71

Watson, Brian C.
Finite-Element Calculations on Alliant FX/80, with Manohar P. Kamat, AS Oct. 94, p446-462

Williams, Fred W.
see Kennedy, David, AS July 94, p245-262

Zhou, Y.
Construction Robot Force Control in Cleaning Operations, with M. J. Skibniewski, AS Jan. 94, p33-49